IN THE CLAIMS

1. (Previously Presented) A vehicle powertrain control system comprising:

an electric motor drive system;

an internal combustion engine operatively coupled to said electric motor drive system;

a first battery coupled to said electric motor drive system;

an electronically controlled switch coupled to said first battery;

a second battery coupled to said electronically controlled switch, wherein said first and second battery are directly electrically coupled at a common voltage level when said electronically controlled switch is closed;

wherein said electronically controlled switch isolates said first battery from said second battery upon startup of said internal combustion engine; and

wherein said electronically controlled switch applies power from said second battery to supplement said first battery during select operating conditions.

2. (Original) The vehicle powertrain control system of Claim 1 further comprising a DC/DC converter coupled to said electronically controlled switch, wherein said electronically controlled switch applies power from said DC/DC converter to supplement said second battery.

3. (Original) The vehicle powertrain control system of Claim 1 wherein said electric motor drive system comprises an inverter coupled to an induction motor.

4. (Original) The vehicle control system of Claim 1 wherein said first battery comprises a lead acid battery.

5. (Original) The vehicle control system of Claim 1 wherein said second battery comprises a lead acid battery.

6. (Original) The vehicle control system of Claim 1 wherein said electronically controlled switch comprises a silicon conducting rectifier.

7. (Original) The vehicle control system of Claim 1 wherein said electronically controlled switch comprises a transistor.

8. (Original) The vehicle control system of Claim 1 wherein said electronically controlled switch comprises an electromechanical relay.

9. (Previously Presented) A vehicle powertrain control system comprising:

an electric motor drive system;

an internal combustion engine operatively coupled to said electric motor drive system;

a first battery coupled to said electric motor drive system;

a second battery coupled to a vehicle accessory system;

an electronically controlled switch coupled to said first battery and said second battery;

a DC/DC converter coupled to said electronically controlled switch;

wherein said electronically controlled switch applies power from said DC/DC converter to supplement said first battery, and wherein said DC/DC converter, said first battery, and said second battery share a common electrical reference when said electronically controlled switch is closed; and

wherein said electronically controlled switch isolates said first battery from said second battery during starting of said internal combustion engine.

10. (Previously Presented) The vehicle powertrain control system of Claim 9 wherein said electric motor drive system includes an inverter.

11. (Previously Presented) A vehicle powertrain control system comprising:

an electric motor drive system;

a first battery coupled to said electric motor drive system;

an electronically controlled switch coupled to said first battery;

a second battery coupled to said electronically controlled switch, wherein said first and second battery operate at substantially the same voltage at a common electrical connection when said electronically controlled switch is closed;

wherein said electronically controlled switch applies power from said second battery to supplement said first battery during a first operating condition; and

wherein said electronically controlled switch isolates said first battery from said second battery upon startup of said internal combustion engine.